



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,964	07/15/2003	Craig D. Cuttner	12510/50	9701

26646 7590 01/23/2007
KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

CHAUDRY, MUJTABA M

ART UNIT	PAPER NUMBER
----------	--------------

2133

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER.

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/620,964

Applicant(s)

CUTTNER ET AL.

Examiner

Mujtaba K. Chaudry

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 40-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 40-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' response was received October 10, 2006.

- Claims 1-19 and 40-62 stand rejected.
- Amendments to the Specification are accepted.
- Amendments to the Drawings are accepted.
- Rejections under 35 USC 112 are withdrawn.

Application pending.

Response to Amendment

Applicants' arguments/amendments with respect to claims 1-19 and 40-62 filed October 10, 2006 have been received. All arguments have been fully considered but are not persuasive. The Examiner would like to point out that this action is made final (See MPEP 706.07a).

Applicants contend, "...Kato (the prior art of record) does not teach receiving separately form the at least two data elements, a set of desired code point values..." The Examiner respectfully disagrees. The Examiner would like to point out that Kato teaches to transmit data along with code point values, which are analogous to error correction data. The desired code point values correspond to the data as is taught in the present application. Particularly, the Examiner would like to emphasize that data and code point values are transmitted in serially fashion, which technically means that data is received first and then the corresponding code point values are received. In other words, the Kato teaches to append the code point values to the data

(i.e., Figures 5a-5d) prior to transmission. At the reception, these packets are received in serially fashion and the CRC codes of the received data packets are separately maintained (i.e., col. 10, lines 32-34). The Examiner would like to point out that data transmitted with ECC, such as CRC, is received and at the reception the calculated CRC is compared with a previously received CRC which is received or calculated and a separately. This is well known in the art.

The Examiner disagrees with the Applicants and maintains rejections with respect to claims 1-19 and 40-62. All arguments have been considered. It is the Examiner's conclusion that claims 1-19 and 40-62, as presented, are not patentably distinct or non-obvious over the prior art of record.

See office action:

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-19 and 40-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (USPN 5844918) further in view of Applicants Admitted Prior Art (AAPA).

As per claim 1, Kato substantially teaches (abstract and Figure 4) a data transmission and reception apparatus wherein an error correcting code including of basic data and a BCH-based

Art Unit: 2133

parity code appended to thereto is divided into smaller packets. The Examiner would like to point out that basic data as taught by Kato is shown in Figure 5 to comprise of multiple packets, which is analogous to a data package with at least two data elements. Kato teaches that an error detecting code (analogous to code point values) is appended to each of the thus-divided packets, so that transmission basic data is formed. When the transmission basic data is received, the basic data and a BCH-based parity code are derived from the transmission basic data. Error correcting is carried out with respect to the overall transmission basic data. An error detecting operation is carried out with respect to each packet using the error detecting code. If a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side.

Kato does not explicitly teach to separately receive the code point values corresponding to the data package as stated in the present application.

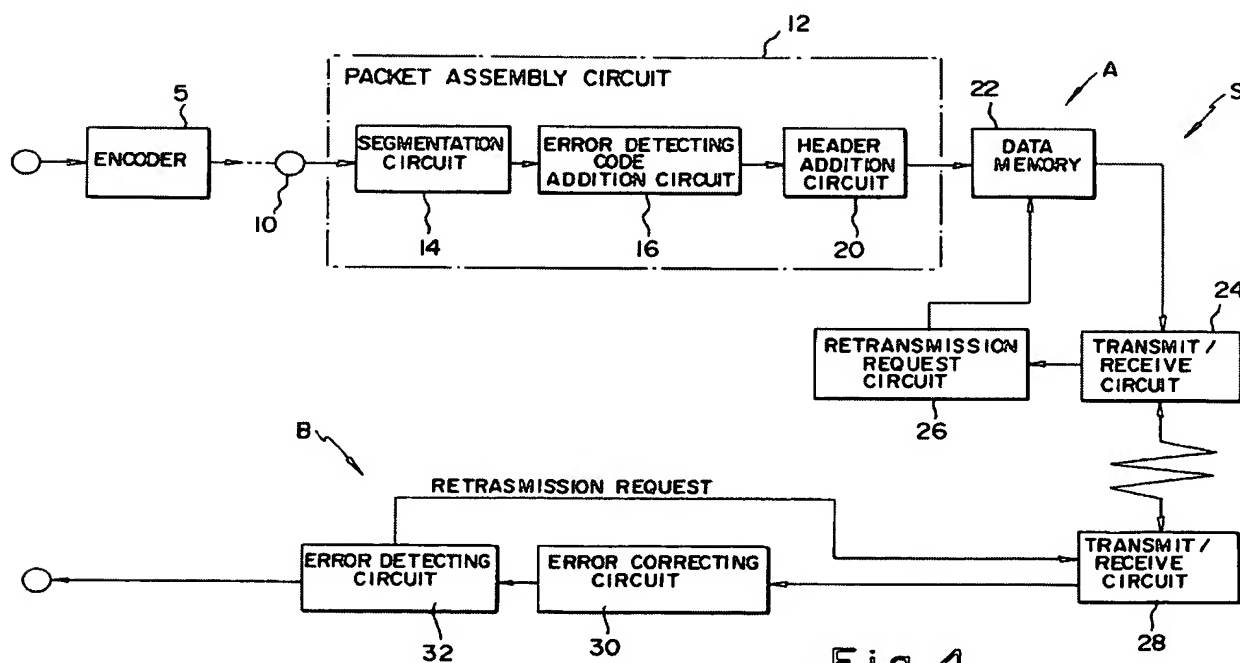


Fig. 4

However, Kato teaches (Figure 4) in the data receiver B, the following operations are carried out, as shown in FIG. 6 and FIGS. 7a to 7d. To begin with, the transmit/receive circuit 28 receives the transmission data packet. The thus-received transmission data packet has such a configuration as shown in FIG. 7a. After all of the transmission data packets including the BCH code have been received, the error correcting circuit 30 corrects errors in the basic data using the BCH code (in S21 and S22 in FIG. 6). In short, the error correcting circuit 30 derives the basic data BD and the BCH-based parity code BCHD which acts as an error correcting parity code, from the received data packet. Then, errors in the basic data are corrected using the BCH code, as shown in FIGS. 7b and 7c. The BCH code includes the basic data BD and the BCH-based parity code BCHD. More specifically, all the three data packets rather than each data packet, as a whole, are subjected to the error correcting operation. As a matter of course, *the CRC codes of the received data packets are separately maintained.* There may be a case where errors arising in transmission can be corrected by the error correcting operation. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data transmission method of Kato by transmitting the data and the code point values/ error detection code separately. This modification would have been obvious to one of ordinary skill in the art at the time the invention was made because one of ordinary skill would have recognized that transmitting data and corresponding code point values separately would have increased synchronization capabilities.

As per claim 2, Kato substantially teaches, in view of above rejection, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side.

As per claim 3, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that once a request for retransmission is made then that packet for which the request is made for is no longer used and hence discarded.

As per claim 4, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. Requesting for retransmission of the invalid packet is a corrective action.

As per claim 5, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side.

As per claim 6, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that once a request for retransmission is made then that packet for which the request is made for is no longer used and hence discarded.

As per claim 7, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that a request for retransmission is made when the characteristic of the particular data element is not useful or when an error has occurred.

As per claim 8, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that it would have been an obvious engineer design choice to have a watermark embedded in the digital packet and use that to determine in

the received packet is valid or not. It is well known in the art for computer files, for example, to have digital watermarks in them as patterns of bits, which appear to be a part of the file and are not noticeable to the user and can be used to detect unauthorized copies.

As per claim 9, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that a request for retransmission is made when the characteristic of the particular data element is not useful or when an error has occurred and is not correctable.

As per claim 10, Kato substantially teaches, in view of above rejections, (Figures 4 and 5) shows data to be transmitted in packets associated with error detection/correction data. The data and error detection/correction is shown to be transmitted from the transmitter to the receiver, which is first network component to second network component.

As per claim 11, Kato substantially teaches, in view of above rejections, (Figures 4 and 5) shows data to be transmitted in packets associated with error detection/correction data. The data and error detection/correction is shown to be transmitted from the transmitter to the receiver, which is first network component to second network component.

As per claim 12, Kato substantially teaches, in view of above rejections, (abstract and Figure 4) a data transmission and reception apparatus wherein an error correcting code including of basic data and a BCH-based parity code appended to thereto is divided into smaller packets. The Examiner would like to point out that basic data as taught by Kato is shown in Figure 5 to comprise of multiple packets, which is analogous to a data package with at least two data elements. Kato teaches that an error detecting code (analogous to code point values) is appended

to each of the thus-divided packets, so that transmission basic data is formed. When the transmission basic data is received, the basic data and a BCH-based parity code are derived from the transmission basic data. Error correcting is carried out with respect to the overall transmission basic data. An error detecting operation is carried out with respect to each packet using the error detecting code. If a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side.

Kato does not explicitly teach to receive the code point values corresponding to the data package from a second network component as stated in the present application.

However, Kato teaches (Figure 4) in the data receiver B, the following operations are carried out, as shown in FIG. 6 and FIGS. 7a to 7d. To begin with, the transmit/receive circuit 28 receives the transmission data packet. The thus-received transmission data packet has such a configuration as shown in FIG. 7a. After all of the transmission data packets including the BCH code have been received, the error correcting circuit 30 corrects errors in the basic data using the BCH code (in S21 and S22 in FIG. 6). In short, the error correcting circuit 30 derives the basic data BD and the BCH-based parity code BCHD which acts as an error correcting parity code, from the received data packet. Then, errors in the basic data are corrected using the BCH code, as shown in FIGS. 7b and 7c. The BCH code includes the basic data BD and the BCH-based parity code BCHD. More specifically, all the three data packets rather than each data packet, as a whole, are subjected to the error correcting operation. As a matter of course, *the CRC codes of the received data packets are separately maintained.* There may be a case where errors arising in transmission can be corrected by the error correcting operation.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the data transmission method of Kato by transmitting the data and the code point values/ error detection code from different network components. This modification would have been obvious to one of ordinary skill in the art at the time the invention was made because one of ordinary skill would have recognized that transmitting data and corresponding code point values from different network components would have increased synchronization capabilities.

As per claim 13, AAPA substantially teaches, in view of above rejections, (figure 1) the first network component to be a set top box. The Examiner would like to point out that this is just an example of a transmitter, which—by the way—can be named anything so long as digital data is transmitted.

As per claim 14, Kato substantially teaches, in view of above rejections, (Figures 4 and 5) shows data to be transmitted in packets associated with error detection/correction data. The data and error detection/correction is shown to be transmitted from the transmitter to the receiver, wherein at the receiver is the error detection/correction which has to monitor the incoming data and log it accordingly to maintain accuracy of the data packets that need retransmission.

As per claim 15, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. Requesting for retransmission of the invalid packet is a corrective action.

As per claim 16, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. Requesting for retransmission of the invalid packet is a corrective action and the invalid packet is not used.

As per claim 17, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side.

As per claim 18, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that a request for retransmission is made when the characteristic of the particular data element is not useful or when an error has occurred.

As per claim 19, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that a request for retransmission is made when the characteristic of the particular data element is not useful or when an error has occurred and is not correctable.

As per claim 40, Kato substantially teaches, in view of above rejection, (abstract and Figure 4) a data transmission and reception apparatus wherein an error correcting code including of basic data and a BCH-based parity code appended to thereto is divided into smaller packets. The Examiner would like to point out that basic data as taught by Kato is shown in Figure 5 to comprise of multiple packets, which is analogous to a data package with at least two data elements. Kato teaches that an error detecting code (analogous to code point values) is appended to each of the thus-divided packets, so that transmission basic data is formed. When the transmission basic data is received, the basic data and a BCH-based parity code are derived from the transmission basic data. Error correcting is carried out with respect to the overall transmission basic data. An error detecting operation is carried out with respect to each packet

using the error detecting code. If a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that digital data transmission and reception is not possible without computer implementation and therefore inherently, Kato's system has to have computer and computer-readable medium, i.e. software to actually perform transmission.

Kato does not explicitly teach to separately receive the code point values corresponding to the data package as stated in the present application.

However, Kato teaches (Figure 4) in the data receiver B, the following operations are carried out, as shown in FIG. 6 and FIGS. 7a to 7d. To begin with, the transmit/receive circuit 28 receives the transmission data packet. The thus-received transmission data packet has such a configuration as shown in FIG. 7a. After all of the transmission data packets including the BCH code have been received, the error correcting circuit 30 corrects errors in the basic data using the BCH code (in S21 and S22 in FIG. 6). In short, the error correcting circuit 30 derives the basic data BD and the BCH-based parity code BCHD which acts as an error correcting parity code, from the received data packet. Then, errors in the basic data are corrected using the BCH code, as shown in FIGS. 7b and 7c. The BCH code includes the basic data BD and the BCH-based parity code BCHD. More specifically, all the three data packets rather than each data packet, as a whole, are subjected to the error correcting operation. As a matter of course, *the CRC codes of the received data packets are separately maintained.* There may be a case where errors arising in transmission can be corrected by the error correcting operation.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data transmission method of Kato by transmitting the data and the code

point values/ error detection code separately. This modification would have been obvious to one of ordinary skill in the art at the time the invention was made because one of ordinary skill would have recognized that transmitting data and corresponding code point values separately would have increased synchronization capabilities.

As per claim 41, Kato substantially teaches, in view of above rejection, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side.

As per claim 42, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that once a request for retransmission is made then that packet for which the request is made for is no longer used and hence discarded.

As per claim 43, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. Requesting for retransmission of the invalid packet is a corrective action.

As per claim 44, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side.

As per claim 45, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that once a request for retransmission is made then that packet for which the request is made for is no longer used and hence discarded.

As per claim 46, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that a request for retransmission is made when the characteristic of the particular data element is not useful or when an error has occurred.

As per claim 47, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that it would have been an obvious engineer design choice to have a watermark embedded in the digital packet and use that to determine in the received packet is valid or not. It is well known in the art for computer files, for example, to have digital watermarks in them as patterns of bits, which appear to be a part of the file and are not noticeable to the user and can be used to detect unauthorized copies.

As per claim 48, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that a request for retransmission is made when the characteristic of the particular data element is not useful or when an error has occurred and is not correctable.

As per claim 49, Kato substantially teaches, in view of above rejections, (Figures 4 and 5) shows data to be transmitted in packets associated with error detection/correction data. The data and error detection/correction is shown to be transmitted from the transmitter to the receiver, which is first network component to second network component.

As per claim 50, Kato substantially teaches, in view of above rejections, (Figures 4 and 5) shows data to be transmitted in packets associated with error detection/correction data. The data and

error detection/correction is shown to be transmitted from the transmitter to the receiver, which is first network component to second network component.

As per claim 51, Kato substantially teaches, in view of above rejections, (abstract and Figure 4) a data transmission and reception apparatus wherein an error correcting code including of basic data and a BCH-based parity code appended to thereto is divided into smaller packets. The Examiner would like to point out that basic data as taught by Kato is shown in Figure 5 to comprise of multiple packets, which is analogous to a data package with at least two data elements. Kato teaches that an error detecting code (analogous to code point values) is appended to each of the thus-divided packets, so that transmission basic data is formed. When the transmission basic data is received, the basic data and a BCH-based parity code are derived from the transmission basic data. Error correcting is carried out with respect to the overall transmission basic data. An error detecting operation is carried out with respect to each packet using the error detecting code. If a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that digital data transmission and reception is not possible without computer implementation and therefore inherently, Kato's system has to have computer and computer-readable medium, i.e. software to actually perform transmission.

Kato does not explicitly teach to receive the code point values corresponding to the data package from a second network component as stated in the present application.

However, Kato teaches (Figure 4) in the data receiver B, the following operations are carried out, as shown in FIG. 6 and FIGS. 7a to 7d. To begin with, the transmit/receive circuit 28 receives the transmission data packet. The thus-received transmission data packet has such a

configuration as shown in FIG. 7a. After all of the transmission data packets including the BCH code have been received, the error correcting circuit 30 corrects errors in the basic data using the BCH code (in S21 and S22 in FIG. 6). In short, the error correcting circuit 30 derives the basic data BD and the BCH-based parity code BCHD which acts as an error correcting parity code, from the received data packet. Then, errors in the basic data are corrected using the BCH code, as shown in FIGS. 7b and 7c. The BCH code includes the basic data BD and the BCH-based parity code BCHD. More specifically, all the three data packets rather than each data packet, as a whole, are subjected to the error correcting operation. As a matter of course, *the CRC codes of the received data packets are separately maintained.* There may be a case where errors arising in transmission can be corrected by the error correcting operation.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data transmission method of Kato by transmitting the data and the code point values/ error detection code from different network components. This modification would have been obvious to one of ordinary skill in the art at the time the invention was made because one of ordinary skill would have recognized that transmitting data and corresponding code point values from different network components would have increased synchronization capabilities.

As per claim 52, AAPA substantially teaches, in view of above rejections, (figure 1) the first network component to be a set top box. The Examiner would like to point out that this is just an example of a transmitter, which—by the way—can be named anything so long as digital data is transmitted.

As per claim 53, Kato substantially teaches, in view of above rejections, (Figures 4 and 5) shows data to be transmitted in packets associated with error detection/correction data. The data and

Art Unit: 2133

error detection/correction is shown to be transmitted from the transmitter to the receiver, wherein at the receiver is the error detection/correction which has to monitor the incoming data and log it accordingly to maintain accuracy of the data packets that need retransmission.

As per claim 54, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. Requesting for retransmission of the invalid packet is a corrective action.

As per claim 55, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. Requesting for retransmission of the invalid packet is a corrective action and the invalid packet is not used.

As per claim 56, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side.

As per claim 57, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that a request for retransmission is made when the characteristic of the particular data element is not useful or when an error has occurred.

As per claim 58, Kato substantially teaches, in view of above rejections, (abstract) that if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that a request for retransmission is made when the characteristic of the particular data element is not useful or when an error has occurred and is not correctable.

As per claim 59, Kato substantially teaches, in view of above rejections, (Figures 4 and 5) shows data to be transmitted in packets associated with error detection/correction data. The data and error detection/correction is shown to be transmitted from the transmitter to the receiver, which is first network component to second network component.

As per claim 60, Kato substantially teaches, in view of above rejections, (Figure 5 and abstract) that code point values are successively received and if a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that once a request for retransmission is made then that packet for which the request is made for is no longer used and hence discarded.

As per claim 61, Kato substantially teaches, in view of above rejections, (Figures 4 and 5) shows data to be transmitted in packets associated with error detection/correction data. The data and error detection/correction is shown to be transmitted from the transmitter to the receiver, which is first network component to second network component.

As per claim 62, Kato substantially teaches, in view of above rejections, (abstract and Figure 4) a data transmission and reception apparatus wherein an error correcting code including of basic data and a BCH-based parity code appended to thereto is divided into smaller packets. The Examiner would like to point out that basic data as taught by Kato is shown in Figure 5 to comprise of multiple packets, which is analogous to a data package with at least two data elements. Kato teaches that an error detecting code (analogous to code point values) is appended to each of the thus-divided packets, so that transmission basic data is formed. When the transmission basic data is received, the basic data and a BCH-based parity code are derived from the transmission basic data. Error correcting is carried out with respect to the overall

transmission basic data. An error detecting operation is carried out with respect to each packet using the error detecting code. If a packet is found to contain errors, a request for retransmission of that packet will be sent to the sending side. The Examiner would like to point out that digital data transmission and reception is not possible without computer implementation and therefore inherently, Kato's system has to have computer and computer-readable medium, i.e. software to actually perform transmission.

Kato does not explicitly teach to receive the code point values corresponding to the data package from a second network component as stated in the present application.

However, Kato teaches (Figure 4) in the data receiver B, the following operations are carried out, as shown in FIG. 6 and FIGS. 7a to 7d. To begin with, the transmit/receive circuit 28 receives the transmission data packet. The thus-received transmission data packet has such a configuration as shown in FIG. 7a. After all of the transmission data packets including the BCH code have been received, the error correcting circuit 30 corrects errors in the basic data using the BCH code (in S21 and S22 in FIG. 6). In short, the error correcting circuit 30 derives the basic data BD and the BCH-based parity code BCHD which acts as an error correcting parity code, from the received data packet. Then, errors in the basic data are corrected using the BCH code, as shown in FIGS. 7b and 7c. The BCH code includes the basic data BD and the BCH-based parity code BCHD. More specifically, all the three data packets rather than each data packet, as a whole, are subjected to the error correcting operation. As a matter of course, *the CRC codes of the received data packets are separately maintained*. There may be a case where errors arising in transmission can be corrected by the error correcting operation. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data

Art Unit: 2133

transmission method of Kato by transmitting the data and the code point values/ error detection code from different network components. This modification would have been obvious to one of ordinary skill in the art at the time the invention was made because one of ordinary skill would have recognized that transmitting data and corresponding code point values from different network components would have increased synchronization capabilities.


Conclusion

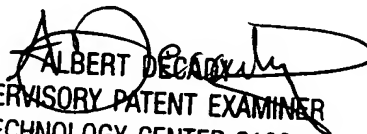
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiries concerning this communication should be directed to the examiner, Mujtaba Chaudry who may be reached at 571-272-3817. The examiner may normally be reached Mon – Thur 6:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, please contact the examiner's supervisor, Albert DeCady at 571-272-3819.


Mujtaba Chaudry
Art Unit 2133
January 11, 2007


ALBERT DECADY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100